

Saturday Magazine.

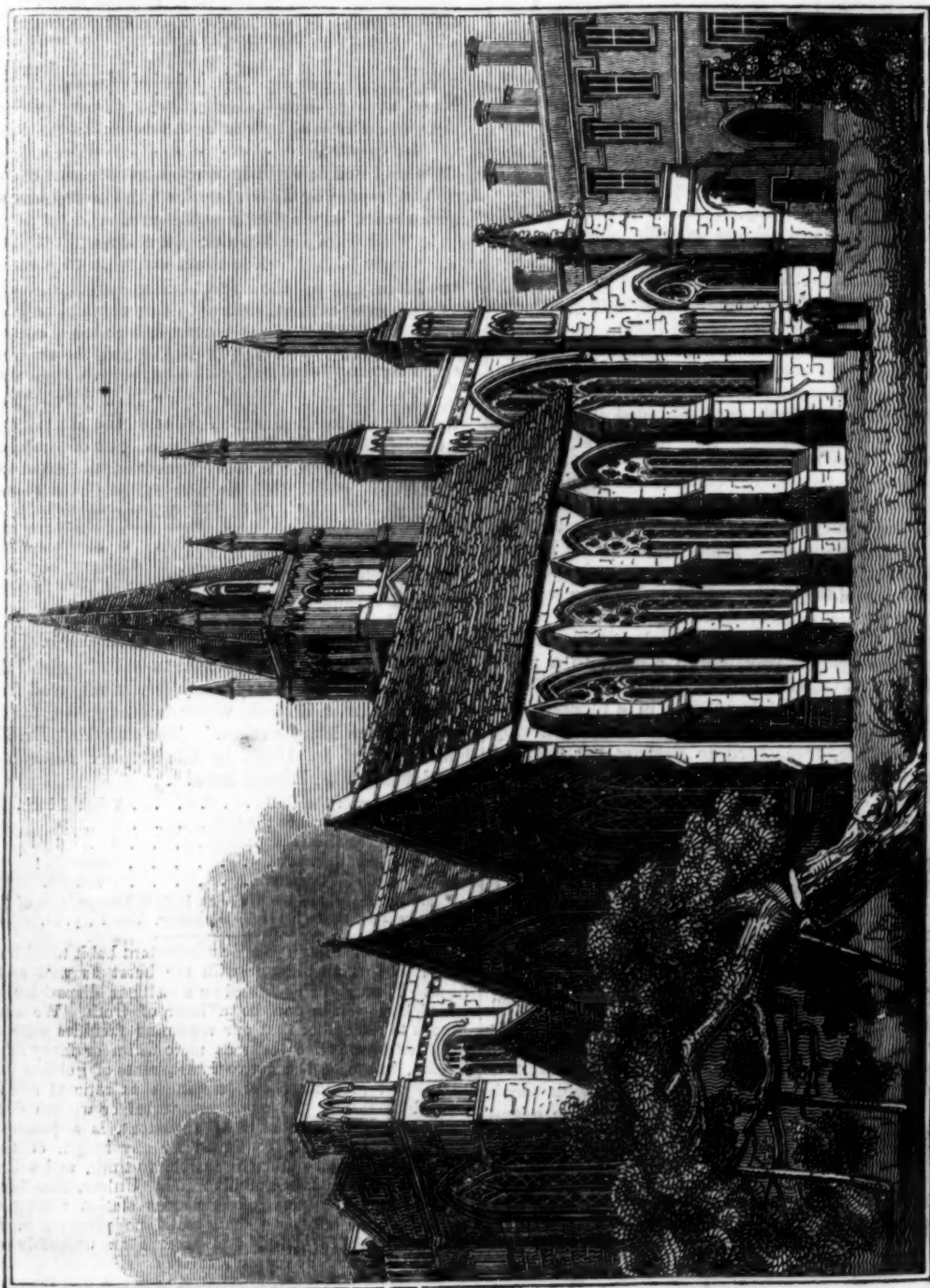
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CATHEDRAL OF CHRIST CHURCH, OXFORD.

THE CATHEDRAL OF CHRIST-CHURCH, OXFORD.

KING Henry the Eighth, on dissolving the monasteries in this country, determined to apply a portion of the funds arising from them to the erection and endowment of some new collegiate churches and bishoprics. Thus he added six episcopal sees to the old number, five of which are retained;—Bristol, Chester, Gloucester, Oxford, and Peterborough, (the two latter having been taken out of Lincoln;) but the sixth, the bishopric of Westminster, after continuing ten years, was abolished in the reign of Edward the Sixth. It is a curious fact, that five other dioceses were contemplated by Henry; viz., Bodmin, Colchester, Dunstable, Shrewsbury, and Southwell; neither of which, owing to the king finding other ways for his money, was ever matured according to the plan devised. In 1546, he removed the see of Oxford from the ancient abbey-church of Osney, where it had been established for five years, to the church of St. Frideswide, from that time called Christ-Church Cathedral; Dr. R. King, abbot of Osney, becoming the first bishop of Oxford. Antiquaries have been eloquent in the praise of the abbey-church of Osney, which was about half a mile from Oxford, assuring us that in extent and beauty, "it was not only the envy of other religious houses in England, but also beyond the seas."

As the venerable structure represented in the plate was originally the church of St. Frideswide, on the site of whose monastery the noble and distinguished college of Christ-Church (first founded by Cardinal Wolsey,) also stands, we cannot forbear giving the legendary history of this lady. Frideswide, anciently honoured as the patroness of Oxford, was the daughter of Didanus, a petty prince in those parts, who had founded an abbey. Algar, Earl of Leicester, fell deeply in love with the maiden, and coveted her for his wife, though she was a nun, and had been set apart as sacred from the world. Meeting with a refusal, he wickedly resolved to carry her off by force; but the virgin, as it is said, miraculously warned of his design, withdrew privately in a boat, to a place ten miles from Oxford, called Benton, where she lay concealed with two of her ladies, in a forsaken hut covered with ivy. Algar in the mean time, following up his purpose, threatened to destroy the town of Oxford, if the inhabitants did not inform him where Frideswide was hidden; till at length, being struck with blindness near the north gate, for his bold impiety, he acknowledged the hand of Providence, implored and obtained the virgin's prayers, was restored to sight, and, going home, ceased to trouble her more. "From which time," as the legend declares, "for divers ages, none of our kings durst enter Oxford, lest they should have met with a like disaster!" She died in 739.

Christ-Church Cathedral is supposed to have been built about the year 1200. It has much of the Norman style, with a tower in the centre, surmounted by a spire of early English architecture. The exterior is greatly hidden by the college-buildings with which it is surrounded; being on the east of the grand square of Christ-Church. The interior contains many interesting objects of attention. The arches of the nave, part of which have been demolished, are in a double series. The choir, which was wainscoted with oak in the time of Charles the First, is very handsome; the roof, a fine piece of stonework, put up by Wolsey, being richly groined and adorned with pendants. The pulpit is antique, and curiously carved. On the north of the choir are chapels of a later period than the rest of the building. In the Dean's chapel are some

ancient altar-tombs, and the shrine of Frideswide, an elaborate and magnificent tomb, consisting of three tiers of tabernacle work, the upper tier of which is richly ornamented with canopied niches. Many of the windows were destroyed during the parliamentary war. Among the monuments are those of Lady Elizabeth Montacute; of Robert Burton, author of the *Anatomy of Melancholy*; of several members of the university, and of other eminent persons who died at Oxford, while Charles the First held his court at Christ-Church; also a very fine statue of Dr. Cyril Jackson, by our eminent living sculptor Chantrey. Part of the cloisters remain. The chapter-house is a beautiful specimen of the early English style.

The following is, we believe, a correct statement of the dimensions of this cathedral.

Length from east to west	154 feet.
Height of choir	37½
Height in the western part	41½
Length of cross aisle, from north to south	102
Height of steeple	144

It would not be right in our short account of the building, to pass by without notice "the bonny Christ-Church bells," which, ten in number, hang in the tower of the Cathedral, and which were brought thither from Osney Abbey. Nor must we omit to mention "the Mighty Tom," the largest bell in England, which was also brought from Osney to this church, and has formed the subject of more than one classical copy of verses. On hearing its well-known sound, the students of the University take it as a signal to retire within their respective colleges. Willis says "Bishop John Fell, who built the noble tower in front of the stately gate of Christ-Church, removed thither, out of the campanile or bell-tower in the cathedral, the great bell called Tom; which Thomas, now called Great Tom of Christ-Church, had this inscription anciently on it:—

In Thomæ laude

Resono Bim Bom sine fraude."

Which monkish couplet of bad latin may be thus "done into English ;"

In praise of Thomas, I repeat

My DONG! DING! DONG! without deceit.

"Dr. Tresham, a papist, is said to have baptized this bell by the name of Mary, when it was removed from Osney to Christ-Church, where he was canon, for the joy of Queen Mary's reign." The excellent Dr. Fell had it recast in 1680, by Christopher Hodson, of London, with additional metal*.

Diameter of the Bell	7 feet 1 inch.
From the crown to the rim	5 " 9
Thickness of striking-place	0 " 6
Weight	18000 lbs!
Weight of Clapper	342 lbs.

* For an account of the different bells in Europe, and of their respective weights, see *Saturday Magazine*, Vol. I., p. 21. M.

THE LOVE OF TRUTH is a most important habit to cultivate, and it claims an alliance with the heart as well as the head. It must be grounded on a virtuous disposition, for no vicious person can be a lover of truth. We ought always to remember that our reasoning faculties were not given us to exercise them as mere whim or fancy might dictate, but to be the active instruments of guiding us to truth, and promoting our happiness as rational and immortal creatures. To enter into verbal or written disputations for the mere sake of argument, is a pernicious practice. It will, if continued for any length of time, make a person altogether insensible to truth, and will unhinge the whole fabric of his mind. Unless, therefore, a love of truth occupies a conspicuous station among our mental excellencies, we shall make no progress in real knowledge. Our mind will present an unseemly and disorderly assemblage of contradictory systems and opinions: it will be without order, symmetry, or grace, and the clouds of prejudice will hang over the chaotic mass, just admitting as much light through the hazy medium, as to make the scattered fragments of truth darkly visible.—BLAKEY

ON THE MORAL AND PHYSICAL CONDITION OF MAN.

II.

It is not in respect to his physical nature alone, that man is so highly elevated in nature. In respect to his moral and religious nature also, man enjoys a high privilege in the converse which it is permitted him to hold with the Most High in his works.

However a knowledge of the truths of Natural Science may offer to him the means of augmenting his temporal welfare, did the study thereof produce an influence pernicious to him, in regard to that welfare which is eternal, who would not wish that it should for ever be to him as a sealed book? But it is not so. The principles of physical science, if rightly viewed, point directly to some of the great and most important truths of REVELATION; above all, they lead directly to an assured knowledge of the existence and attributes of God. "For the invisible things of him from the creation of the world are clearly seen, being understood by those things which are made, even his eternal power and GODHEAD*."

There is a perpetual chain of cause and effect visible through all Nature. Wherever man directs his investigation, he finds causes which are but the effects of others, and these of others in a perpetual chain. Is it wonderful, that he should look for a *first cause*, to which this infinity of effects stands in the same relation that he does to such as are the consequences of his own actions.

Although his search for that first cause among the beings whose existence is made known to him through the medium of sensation, be in vain, yet, ascending through the chain of causes, he has a distinct consciousness that he is approximating to the *first cause*. The number of facts which he perceives to stand in the relation of causes to the rest, continually diminishes as he proceeds, until at length, he arrives at certain of them, beyond which his senses refuse to carry him; and these seem to him to stand next in order to the first cause. They may be classed under the heads of TIME, SPACE, MATTER, and FORCE.

In considering the relations of Time, Space, Matter, and Force, one of the first things that strikes us, is the uniformity of those relations. Such that the same cause shall, under the same circumstances, always produce the same effect. This uniformity constitutes a LAW; and each particular relation of cause and effect, thus uniform, is a LAW OF NATURE.

With regard to such actions as are the immediate subjects of man's own will, every one perceives that he has the power of modifying and varying them, together with the sequence of cause and effect growing out of each, in every conceivable degree; and that he has also the power of adjusting his effort as first cause, so as to produce a certain remote effect, and neither more nor less than that effect. This adaptation of the primary cause (and with it of all the intermediate causes,) to the remote effect, he calls DESIGN. It is this power of *design*, or *contrivance*, which distinguishes the relation of cause and effect, in living and intelligent beings, from that which exists in the operation of inanimate agents and unintelligent beings. Wherever we trace this relation of cause and effect, coupled with design, we may conclude the existence and operation of an intelligent being.

Now this design is MANIFEST throughout Nature. Every blade of grass, every bud, every leaf, every blossom that the wind strews around us, every one of those organized and living beings by which we are surrounded, each of these, in its order, proclaims

* Romans i. 20.

design in the operation of that first cause to which it owes its being; and thus it proclaims the existence of a living and intelligent Creator.

Turning again from the contemplation of the works of God in the universe, to the consideration of his *own* powers, man perceives that not only can he render those powers available for the production of certain remote effects, but, further, that he can render those other *external* powers, over whose action he has no control, available to the same end. Not in any way modifying those powers, for that is impossible,—the mode or law of their action being by the will of the great First Cause,—but *applying* them. Thus, he can avail himself of the gravitating force, or weight, of a stone, to produce either pressure or impact; the action of the *stone* is the same, but in the one case, the impulses of gravitation which it continually receives, are as *continually* destroyed, whilst in the other, their accumulated energy is destroyed altogether. Nay, further, he has power to bring about the action of these natural causes upon one another. He can bring, for instance, matter under the action of force, and he can subject both to the influence of time and space. He can, further, induce the operation of these combinations in every possible degree upon one another.

Now, looking into the natural world, he perceives that there must have taken place in it some such operation as that of which he thus finds himself capable. All that now exists, might have existed as it does now; there might have been every atom of matter, every particle of force, and the same space occupied through the same time, and these subject to the same laws; and yet, had not these been brought under the operation or influence of one another, there would have remained a state of things, the disorder of which it is beyond the power, or even the province, of imagination to conceive. The whole would have remained without form and void, replete with the elements of disorder, and the subject of perpetual change.

Here, then, we trace again, evidence of the operation of a First Cause, bringing together what we have termed second causes, and thus applying their combined action according to the laws which He has himself first imposed upon them, according to a method of operation to which man finds something similar, but inconceivably inferior in degree, in his own power.

There is yet another proof of the existence of the Deity, drawn from strictly scientific considerations, and founded indeed in the very principles of science.

Not only, do the planets revolve round the sun, but about certain axes within themselves, producing thereby the alternations of day and night; and these axes are inclined at certain angles to the planes of their revolution, thereby bringing about the variety of the seasons. Now to effect all this, as we find it effected, the one original impulse must have been made with a certain force, in a certain direction, and at a certain point, on the surface of each planet. Here, then is design. And when we consider that the whole of animated nature is contrived with a view to the alternations of light and heat,—the green leaf, the bud, the blossom, and the fruit, in vegetables; the clothing, the internal organization, and the principle of life, in animals—do we hesitate to admit that design to be the emanation of infinite wisdom?

If I wished to ascend or descend a hill, or pass from one portion of it to another, with the least possible muscular exertion or expense of force, a slight consideration would show me that the precise path to

be pursued, would be dependent on the form and inclination of the different parts of the hill, upon the nature of my own muscular energies, and upon other data, of which I could scarcely by any possibility acquire a knowledge, and on which, when known, my intellectual powers would be quite insufficient to enable me to found a conclusion. Under these circumstances, the chances are infinitely greater, that I should select the wrong than the right path. Now, if I were to project a stone up the hill, or obliquely across it, or suffer it to roll down it, whatever obstacles opposed its motion, whether they arose from friction, resistance, or any other cause, constant or casual, still would the stone, when left to itself, ever pursue that path in which there was the least possible expenditure of its efforts; and if its path were fixed, then would its efforts be the least possible in that path. This extraordinary principle is called that of least action; its existence and universal prevalence, admit of complete mathematical demonstration.

Every particle of dust blown about in the air, every particle of that air itself, has its motions subjected to it. Every ray of light that passes from one medium into another, deflects from its rectilinear course, that it may choose for itself the path of least possible action, and for a similar reason, in passing through the atmosphere, it bends itself in a particular curve down to the eye. The mighty planets too, that make their circuits *ever* within those realms of space, which we call our system; the comets, whose path is beyond it; *all* these are alike made to move so as best to *economize* the forces developed in their progress.

Now, those forces which are *not* developed by living beings, are planted in the substances in which they reside, by the hand of God, and subjected to the laws which he from the beginning imposed upon them. It has pleased the Almighty then that the works of his hands should every-where be wrought in accordance with that principle of least effort, which he has also implanted as a principle of our nature in us, and which, thus impelled, we ever develop more or less, in our own feeble efforts. The difference lies only in this, that in Him this principle acts controlled by infinite wisdom, and therefore, its operation is *perfect*; with us, it manifests itself under the guidance of a limited knowledge and most erring judgment, and its development partakes of their imperfections.

In the adjustment of his efforts, so as to produce the required effect with the least possible expense of force—it has been shown then, again, that (according to a great truth of revelation) man is created in the image of God, and that he retains the resemblance. The principle of force lodged in each particle of matter, has been believed to be but a direct emanation of the Deity, *there* acting continually, and at every moment. The scrupulous economy of force, the wonderful store (if the expression may be used) which Nature sets by it, points to that conclusion.

Man was created in the image of God. And it has been shown, that, in the possession of a power, almost absolute, over the material existences around him; and, in the exercise of an intellect whose resources no effort would seem to exhaust; and, in the manner in which he exercises that power and that intellect; he may yet be said to retain traces of that original from which he first sprung, and that image wherein he was first created.

Do not these reflections at once suggest the *contrast* of his moral condition? What does this description of his majestic bearing in creation, the extent of his physical powers, the resources of his intellect, and his resemblance in respect to his

physical nature, to the God who made him, so forcibly present to the mind as the degradation of his moral nature, and its fall from that perfect image in which we may reasonably conclude that it too, as well as his physical nature, was first created.

[Abridged from MOSLEY'S *Mechanics applied to the Arts.*]

HINDOO RIDDLES.

THE Hindoos (especially their females) take great delight in riddles, apologues, and fables. By this method they convey pleasure, instruction, or reproof: see them in their marriage feasts, or in their "evenings at home," how pleasantly they pass their time in thus puzzling each other, and calling forth the talents of the young. The story of *Sinthā-manni* and *Vera-māran* is a striking instance of the importance which they attach to riddles.

The king, called *Veerasoora-toora-tān*, and his nobles went out with their chariots, horsemen, footmen, and elephants, to hunt the savage beasts of the desert. After some time the king complained of thirst, when the prime-minister took him to a deep well, and whilst his majesty was looking down, his faithless minister pushed him in; he then returned to the capital, published the death of the sovereign, and proclaimed himself king. The queen of the deceased monarch immediately went to a distant country, and procured a living by selling fire-wood. Not long after her residence there, some officers, on a hunting excursion, saw her, and told their sovereign of a majestic woman they had seen selling fire-wood. The king sent for her, became enamoured with her, and determined to make her his wife; but she, on pretence of going out a little, departed to another country. After travelling some days she came in sight of the cottage of a despised pariah, and, on going near to it, he came out, and, seeing her noble mien, bowed to the earth. She said "I am a seller of fire-wood, and beg you will allow me to live near to you." The pariah replied, "Madam, you must be of another rank; you look like a queen. I will build your majesty a cottage, and supply your wants." She had not been long there before she brought forth a son to the late *Veerasoora-toora-tān*, to whom she gave the name of *Vera-māran*. The infant was anointed with oil, and rubbed with holy ashes. The pariah went forth, and blew the victorious chank, put up the triumphant flag, purchased anklets, a waist-chain, bracelets, armlets, and neck-rings, for the infant prince. So great was his joy, that he made gifts in money, robes, and cows to the brahmins, and offerings to the gods.

In course of years, the youth became exceedingly beautiful and accomplished. In the battle or the chase he was always the hero of the field. He having heard of the fascinating princess *Sinthā-manni*, determined to try to get her for his wife, but was told she would not give her hand to any one who could not explain all her riddles, and those who failed were to forfeit their lives. His soul was fixed on the attempt; and, notwithstanding many princes had fallen a sacrifice to the talented princess, and in despite of the entreaties of his friends, he took his departure for the palace of *Sinthā-manni*. When he came in sight of the city, he was perfectly astonished with its splendour. Now he thought of all he had heard of the nine hundred and ninety-nine gates; of the ponds and streams of perfumed waters; of the groves; of the fair deity of the palace, with her attendants, the astronomers, the heralds, the bearers of incense, the beautiful footmen, the nobles, the musicians; he thought on her banners of gold, her

throne of precious stones and gold; her shield, made of the same metal; her couch made of the nine precious stones; and his mind became enraptured with the prospect of having her for his own. With joy he entered the fort without asking permission, and galloped about the streets; after which he ordered his attendant to make a triumphal arch of fragrant flowers. He then spread his carpet on the ground, and sate there, that he might be seen by the passers by. They soon began to inquire about his country, and his object in coming to their city; and when they heard it, they laughed and clapped their hands, saying, "Another madman has come to explain the riddles of the princess, and to add another to the list of those whose lives have been sacrificed to their ambition."

He arose, and went on till he came to the tenth gate, when the guards pushed him away, and treated him with great contempt. He then sent a letter to the Princess by a confidential person, stating his object, and requesting to be allowed to come into her presence. The next day Veera-māran stood before the beautiful, the splendid Sinthā-manni; there she was seated on her throne of diamonds and rubies; there were the warriors, with their shields of gold; there were the poets, there the players on instruments, the tambour, the harps, and the lutes. Near her were females of great wisdom, and all around were garlands of flowers; there was the precious ointment, and there were those who sprinkled the guests with perfumed waters. Veera-māran looked around, and then with great dignity walked up to the Princess, and requested to have a seat by her side on the throne. She then commenced her riddles (which in number amounted to a thousand); but Veera-māran, so fast as she proposed them, gave the most complete explanation. The Princess became greatly agitated, as she thought she must now give her hand to this young stranger. They sprinkled her with rose-water, all the courtiers were much excited, and one thing only remained to be done, before this wonderful transaction should come to its crisis. The Prince had to give her a riddle, which if she failed to explain, she became his own; but if she succeeded, his life was the forfeit. Veera-māran boldly gave his riddle, and retired for the night. In the course of the evening, a beautiful female, in elegant attire, came to his lodgings, and said, "O you who have beautiful arms, I have come to touch your majestic feet, and gain your favour." He inquired who she was, when she replied, "I am the daughter of the Prime-Minister to the Princess Sinthā-manni, to whom, I am told, you have proposed a riddle, which she cannot explain. Now I wish you to unfold it to me, that I may tell the meaning in the morning." The Prince then said, "Give me the jewels and ornaments which you now have on as a pledge, and I will unfold the riddle." This being done, she expressed a wish to retire for a moment, but did not return.

The morning came, and there was the Princess, with great pomp seated on her throne. In her hand was a large sword, and near her were the executioners, ready to drag off the body of Veera-māran. She then, with great triumph, explained the riddle he had proposed the day before, and was about to order him for execution, when he begged to be allowed to relate a dream he had during the night. This being granted, he said, "A young female, disguised like a parrot of the groves, came and pledged her jewels to get the meaning of my riddle. I will show them to you." He then began to take them from his waist-cloth, when the Princess waved her

hand for him to desist, and said, "I was your visiter—I am conquered. Come, sit on my throne." She then made obeisance to him; the courtiers worshipped him; and Veera-māran became the husband of the beautiful Sinthā-manni.

By this account, we gain a clearer view of the importance attached to the riddle proposed at the marriage of Sampson; of the Psalmist, who said, "I will open my dark sayings;" of the riddle "put forth" by the Prophet Ezekiel at the Divine command; of the skill and industry of the Queen of Sheba; and of the adroitness of Solomon who gave an answer "to all her questions."

[ROBERTS'S *Oriental Illustrations of the Scriptures.*]

THE LINNET AND THE HAWK. A FABLE.

Too oft when Force and Cunning seek
To injure or delude the weak,
They prosper in their plan of shame,
Whilst Vengeance waits to take her aim;
For, till the cup of sin is full,
She walks unheard, with feet of wool!
Again, some cases I have known
Of Force and Fraud at once o'erthrown
By guardian spirits, who defend
The steps of Innocence, their friend.
Thus Una* in the wilderness
Was succoured in her sore distress;
The lion (says the legend sweet)
Crouched harmless at the maiden's feet.
And so the simple may prevail,
When Guilt and its devices fail.
To these reflections shall be tack'd
A Fable, which is nearly Fact.

Where London spreads its precincts wide,
There's many a house, whose smoky side,
In lane, or court, or alley plac'd,
Bears tokens of a rural taste,
And 'midst a busy town's alarms,
Tells of the country, and its charms.
Here on the window-sills are set,
Geranium, myrtle, mignonette;
And higher 'mongst created things,
Canaries trim their golden wings,
Or wrapped within his dingy coat
A goldfinch strains his little throat.
True he is caged: but what of that?
He sings, and cares not for the cat.

A LINNET, in his prime of song,
And happy as the day was long,
Though in a dark and narrow way,
Poured forth his merry roundelay.
His bars unknown; (though bars indeed
His little manger full of seed;
What danger should he apprehend,
In health and tune, with man his friend?)

But ah! he shrinks with sudden fear,
And feels a mortal foe is near!
Wheeling around in rapid flight
A cruel Hawk has caught the sight,
Has seen the bird! but blind with rage
And fierce desire, has seen no cage.
So when to glut his ruthless maw
With the poor trembler that he saw,
He headlong pounce'd the prize to gain,
The bars of iron stunn'd his brain!
Reeling he fell, with broken limb,
And no one stopp'd to pity him †.

So may they fall whose base intent
Is laid against the innocent:
So may some barrier in the way,
Betwixt the wicked and their prey
Though hid at first from mortal sight,
Prevent the wrong, DEFEND THE RIGHT! M.

* SPENSER'S *Fairy Queen*, Book I., Canto 3.

† That a Hawk did lately fly at a Linnet, in a cage which was suspended against the window of a house, in a crowded neighbourhood in the city, is a fact. He was taken, and is still living.

THE NATURAL AND CIVIL HISTORY OF CEYLON.

VI. VEGETABLE PRODUCTIONS.—THE COCOA-NUT TREE.—THE PALMYRA.—THE AREEKA TREE.—THE JAGGREE PALM.—THE TALIPAT-TREE.—THE CINNAMON-TREE.

THE most remarkable vegetable productions of Ceylon are the Palms*, the Cinnamon-tree, and the tree bearing Eve's-Apple, or the Forbidden-Fruit†. Of these I shall give a brief description. The cocoa-nut-tree usually grows to the height of from seventy to eighty feet. It has a sheer, branchless stem, surrounded by annular indentations, the number of which ascertains the age of the tree, as each year an additional circle is produced. The stem is nearly the same size from the root to the top, from which a crest of large pinnated leaves radiates about a yard in breadth, and four yards in length. These leaves are invariably twelve in number, and form a circle, divided from the circumference to the centre, like the spokes of a wheel. The leaf is separated by a strong woody fibre, from which smaller fibres shoot out on either side, exactly opposite to one another, as in the common fern; of these, excellent brooms are made by the natives. The nuts grow in clusters, within the leafy crest, and each tree, when full-grown, produces from two to three dozen. The fibrous husk, which covers the nut, is manufactured into cables and cordage of various descriptions; and these cables have the remarkable quality of suffering no injury from long immersion in salt-water, but on the contrary; are said to be preserved by it.

In Ceylon, this filament, which is called coire, is obtained from a tract of cocoa-nut trees, forming a belt, a hundred and thirty miles long, and one mile and a-half broad, along the south-western coast. It has been calculated that this belt contains between ten and eleven millions of cocoa-nut trees, and produces, besides a vast quantity of oil, six thousand leaguers of arrack, and upwards of three million pounds' weight of coire, sufficient to rig twenty first-rate ships of war. The produce of a good tree in this belt, has been estimated at from fifty to a hundred cocoa-nuts in the year, each nut, as food, being equivalent to at least three ounces of rice.

From the kernel of the cocoa-nut is extracted a thick oil, used by the natives throughout India, for lighting their houses and anointing their bodies. The shell is converted into ladles. At the top of the tree grows a large shoot, two feet long, and as thick as a man's thigh; commonly called the cocoa-nut cabbage; when boiled, it is an excellent vegetable for the table; but as soon as it is cut off, the trunk gradually perishes. The toddy, from which arrack is distilled, is drawn from this tree; a pot, measuring two quarts, is fixed to a shoot, in which an incision is made at night, and is brought down at sun-rise filled with the exuded sap. The filaments that surround the stem are manufactured into a kind of sackcloth, which is very durable. The wood of the trunk is porous and spongy, and therefore of little value, but it is occasionally employed for pillars to support temporary buildings. The leaves are used for thatching the roofs, and covering the walls, of huts; they are also converted into torches, when dry, and, when fresh, are a favourite food of the elephant.

THE PALMYRA.

THE next most useful of the palms in Ceylon is the palmyra: its manner of growth is similar to that of the cocoa-nut tree; the stem attains nearly the same height, but is more uniformly perpendicular, and the texture of the timber much firmer and more durable. The blacker this is the more valuable, and it has the rare quality of resisting the depredations of insects. The leaves are shorter, harder, and thicker, than those of the tree just described, having the form of an opened fan, as which they are frequently used: upon slips of these leaves all the Cingalese manuscripts are written with an iron style. The fruit of this palm is a firm pulp, about the bigness of a new-born child's head, of a black colour, emitting an agreeable perfume, and containing in its centre, from one to three nuts, about the size of a common plum. The toddy drawn from the palmyra makes better arrack than that extracted from any other palm-tree, and a very good sugar is obtained by mixing the toddy with the pulp of the fruit, and boiling them together. This tree, besides

supplying a valuable wood for exportation, is of the greatest importance to the natives, its fruit and roots being used by them for food, and many other parts being very successfully applied to the purposes of manufacture. The cocoa-nut tree is almost exclusively confined to the southern, and the palmyra to the northern parts of the island, on the coast.

THE AREEKA-TREE.

THE areeka-tree is the smallest of the palms, the stem not being more than a foot in circumference, though it attains to the height of sixty feet. It grows perfectly straight, and the leaves are confined to the top. The nuts, which grow in clusters at the bottom of the leaves, are of an oval shape, and somewhat smaller than those of the palmyra. They resemble nutmegs in consistence, being solid all through, and of a faint white, streaked with red.

One of these trees yields from 300 to 1000 nuts, and some produce 1500. "They bear," says Knox, "but once in the year, generally; but commonly, there are green nuts enough to eat all the year long. The leaves fall off every year, and the skins, upon which they grow, with them. These skins grow upon the body of the tree, and the leaves grow out of them. They also clasp about the buds or blossoms which bear the nuts, and as the buds swell, so this skin cover gives way to them, till at length it falls quite off with the great leaf on it: it is somewhat like leather, and of great use to the country people; it serves them instead of basins to eat their rice in, and when they go a journey, to tie up their provisions; for in these skins or leaves they can tie up any liquid substance, as oil or water, doubling it in the middle and rolling it on the two sides, almost like a purse. Ordinarily, they are about two feet in length, and a foot and a half in breadth. In this country there are no inns, therefore, when people travel, the manner is to carry, ready dressed, what provisions they can, made up in these leaves. The trees within have only a kind of pith, and split easily from one end to the other. The wood is hard and very strong; it is used as laths for houses, and also as rails instead of hedges. Money is not very plentiful in this land; but, by means of these nuts, which are a great commodity to carry to the Coromandel coast, the inhabitants furnish themselves with all things they want. The common price of nuts, when there is a trade, as there was when I came first on this land, is twenty thousand for one dollar; but now (A.D. 1681) they lie and grow, or rot on the ground under the trees."

THE JAGGREE-PALM.

A FOURTH species of palm is the jaggree, so called from its fertility in the production of sugar. It has the same tall branchless stem as the cocoa-nut tree; but the fruit hangs from the top in straight lines upwards of a yard long, all round the trunk. The leaves are serrated. The nut is about the size of a common marble, and is chewed in every part of India with the betel-leaf. Sago is the pith of this palm, dried and granulated.

THE TALIPAT-TREE.

THE most remarkable of the palm tribe is the talipat-tree, of which a detailed account was given in No. 152 of the *Saturday Magazine*, of which Knox says, "This tree is as big and tall as a ship's mast, and very straight, bearing only leaves, which are of great use and benefit to the inhabitants; one single leaf being so broad and large, that it will cover fifteen or twenty men, and keep them dry when it rains. The leaf, being dried, is very strong and limber, and most wonderfully made for men's convenience to carry along with them: for though this leaf be thus broad when it is open, yet it folds close, like a lady's fan, and then it is no bigger than a man's arm, and extremely light. The people cut them into pieces and carry them in their hands. The whole leaf spread out is round, almost like a circle; but the pieces cut for use are nearly like unto a triangle. They lay them upon their heads as they travel, with the peaked end foremost, which is convenient to make their way through the boughs and thickets. When the sun is vehement they use them to shade themselves from the heat: all soldiers carry them; for besides the benefit of keeping them dry, in case it should rain upon the march, these leaves make their tents to lie under in the night."

"This tree bears no fruit until the last year of its life, and then it comes out on the top, and spreads abroad in great branches, all full first of yellow blossoms, most beautiful to behold, but of a very strong smell; then it comes to a

* See *Saturday Magazine*, Vol. II., p. 203; and Vol. V., p. 186.

† Ibid., Vol. V., p. 90.

fruit, round and very hard, as big as our largest cherries, but good only for seed to set: and though the tree bears but once, it makes amends, bearing such great abundance, that one tree yields seed enough for a country. If these trees stand near any houses, the smell of the blossom so much annoys the inhabitants, that they, regarding not the seed, forthwith cut them down. The stem has within it a pith only, which is very good to eat, if the tree be cut down before it runs to seed. It is beaten to flour in mortars, and baked into cakes, which taste much like wheat bread. It serves instead of corn before the harvest is ripe."

THE EVE'S APPLE.

THIS is one of the most remarkable vegetable productions of the island. The tree which bears this singular fruit, grows to the height of from twenty to thirty feet. It has an irregular inelegant stem, with a scanty growth on the lower parts, but on the top the leaves germinate luxuriantly, forming an extensive and graceful crest. The branches shoot upward, though a few strike out horizontally, and these are generally charged with the greatest quantity of fruit. This is a deadly poison, and as if to remove the danger of mischief, Providence seems to have placed it above the reach both of rational and brute animals, as it hangs chiefly upon the crest of the tree, and never grows so low as to be reached from the ground. The trunk is about the size of a man's body, and covered with a dark corrugated bark. The leaves are long and narrow, shaped like those of the bay tree, with a smooth shining surface, the fibres crossing the filament that divides the leaf longitudinally, being strongly marked and regular. The fruit, which hangs from the bough on a long limber stem, about the size of a quill, is shaped something like the large white magnum-bonum plum, somewhat flattened at the extremities, but exhibiting a feature as singular as it is unpleasing. From the upper side it appears precisely as if a portion had been bitten off, and from this circumstance the Mohammedans, who imagine the primitive paradise to have been situated in Ceylon, have called it the forbidden fruit; conceiving that the mark of that breach of the Divine interdiction, which entailed so grievous a curse upon the posterity of Adam, has been placed by the Almighty upon this singular tree, and that, in consequence of Eve's crime, the fruit was rendered poisonous, in order to secure it from future profanation. The blossom is a white flower something larger than that of the apple-tree, opening into five long pointed leaves, slightly pinnated, and presenting a pod which shoots from the extremity of a capsule, something like that of the common gilly-flower. The fruit is very tempting to the eye, being of a vivid orange on the outside, and looking exceedingly beautiful, as the rays of the sun fall upon its smooth and glowing surface. When cut, the pulp, which is solid and without any stone, is of a deep ardent crimson, but exceedingly acrid when the smallest quantity is placed in contact with the tongue. The Mohammedans of Ceylon formerly expressed great veneration for this tree, and connecting it with the print of Adam's foot on the summit of a mountain in the interior, of which they are very tenacious in their belief, they feel satisfied that this island is the locality of the earthly Paradise. This belief is moreover strengthened by the legend of Adam's bridge, and the tombs of Cain and Abel in the island of Ramisseram.

THE CINNAMON-TREE.

THE Cinnamon-tree, which is the most profitable vegetable production of this island, is a kind of laurel, growing to the height of from twenty to thirty feet. The trunk is about the size of an ordinary man's body, giving out a great number of large horizontal branches, clothed with thick foliage. The roots, which strike deep into the earth, and spread considerably, are covered with an odoriferous bark on the outside, of a grayish-brown, and on the inside of a reddish hue. Camphor is extracted from them. The stalk of the leaf when chewed, tastes strongly of cinnamon, but is fresher and more juicy. The leaves are oval, from four to six inches long, and about three broad, with a smooth surface and plain edge. The blossoms are numerous clusters of small white flowers, about the size of the lilac, which they much resemble. The tree produces a fruit of the form of an acorn, but not larger than a small black-currant, and in taste like the juniper-berry. When removed from its socket, it has the shape of an olive, and when dry, becomes a thin shell, containing an oval kernel, no larger than the seed of an apple. If boiled in water, it yields an

oil, which floats on the top, and is used for burning in lamps. As soon as it congeals, it becomes a solid substance like wax, and is formed into candles.

The trees planted for the purpose of obtaining cinnamon, shoot out a great number of branches apparently from the same root, and are not permitted to rise above ten feet. The sprouts which are cut for barking, are about the length and thickness of a common walking-stick.

Those trees which are cultivated, may be reared in the four ways following: from seeds sown during the rains; from shoots cut from large trees; from layers; and by transplanting old stumps. A dry soil and frequent rain is necessary to produce cinnamon of the finest quality. The tree blossoms in the month of January, and it is then that the plantations look most beautiful. In April the fruit is ripe, and soon afterwards the process of decortication begins. May and June are esteemed the best months for this purpose, and are styled the great harvest. November and December are likewise considered favourable months, and are called the little harvest.

In order to ascertain whether the bark is ripe, the peeler strikes his knife obliquely into a branch; if on drawing it out, the bark divides from the wood, the cinnamon has attained its maturity, but if it adhere, it must remain until it be detached from the limbs. The knife employed in peeling, is a small sharp-pointed hook.

When a branch is completely cleared of small shoots and leaves, the cinnamon-peeler, seated on the ground, makes two parallel cuts up and down the length of the bark, which after being gradually loosened with the convex edge of the knife, he strips off in one entire slip, half the circumference of the branch. This slip he passes to a companion, who is seated in a similar manner by his side, with one foot pressed against a piece of wood, from which a round stick slopes towards his waist. Upon this stick he lays the slip of bark, keeps it steady with his other foot, and holding the handle of the knife in one hand, and the point of it in the other, scrapes off the epidermis or superficial cuticle, which is very thin, of a brown colour on the outside and white within. In doing this considerable attention is necessary, for if any of the outer bark remain, it gives a bitter taste to the cinnamon. When this operation has been performed, the cinnamon is of a pale-yellow colour, and about the thickness of parchment. When spread on mats to dry in the sun, it curls up and becomes darker. The smaller pieces are then inserted into the larger, and, both contracting still closer, assume the form of solid rods. These are tied up into bundles with pliant canes.

When cinnamon is shipped for exportation, a quantity of loose black-pepper is thrown in upon it, which, by attracting the superfluous moisture, preserves and improves the cinnamon, while at the same time its own flavour is improved. Thus the two spices prove mutually beneficial.

The best cinnamon is of a light-brown colour, and does not much exceed the thickness of royal paper. It is of a fine texture, of a smooth surface, and brittle. Its taste is sweet and sharp. The coarse cinnamon is dark, thick, and hard. It has a hot and pungent taste, exciting the tongue, and leaving upon the palate a somewhat acrid bitter.

The quantity of cinnamon sent from Ceylon to England yearly, amounts to four thousand bales, or three hundred and fifty-three thousand pounds weight, for which the India Company pay to the British Government, a stipulated price of sixty thousand pounds sterling, and transport it to England at their own expense.

Oil of cinnamon was formerly made at Colombo, of the fragments and small pieces broken off in packing. A great quantity of this oil is obtained from the coarse cinnamon, which is considered unworthy of exportation in any other shape. Three hundred pounds weight of the bark, are said to yield no more than twenty-four ounces of oil. It is, therefore, necessarily dear, and used commonly to sell at the rate of ten guineas a quart. It is highly esteemed both as a medicine and as a perfume. That of the best quality, extracted from the finer sorts of cinnamon, is of a pale-gold colour, and different from all other oils. Its excellence is determined by its sinking in water. The oil distilled from coarse cinnamon is of a dark-brown hue, and does not sink in water. The wood of the tree, when deprived of the bark, has no smell, and is chiefly used for fuel.

The persons employed in the cultivation and barking of cinnamon, are called Chalias. They are a distinct tribe of people; not the lowest, but almost the poorest of the Cingalese casts. They appear, however, to be contented with

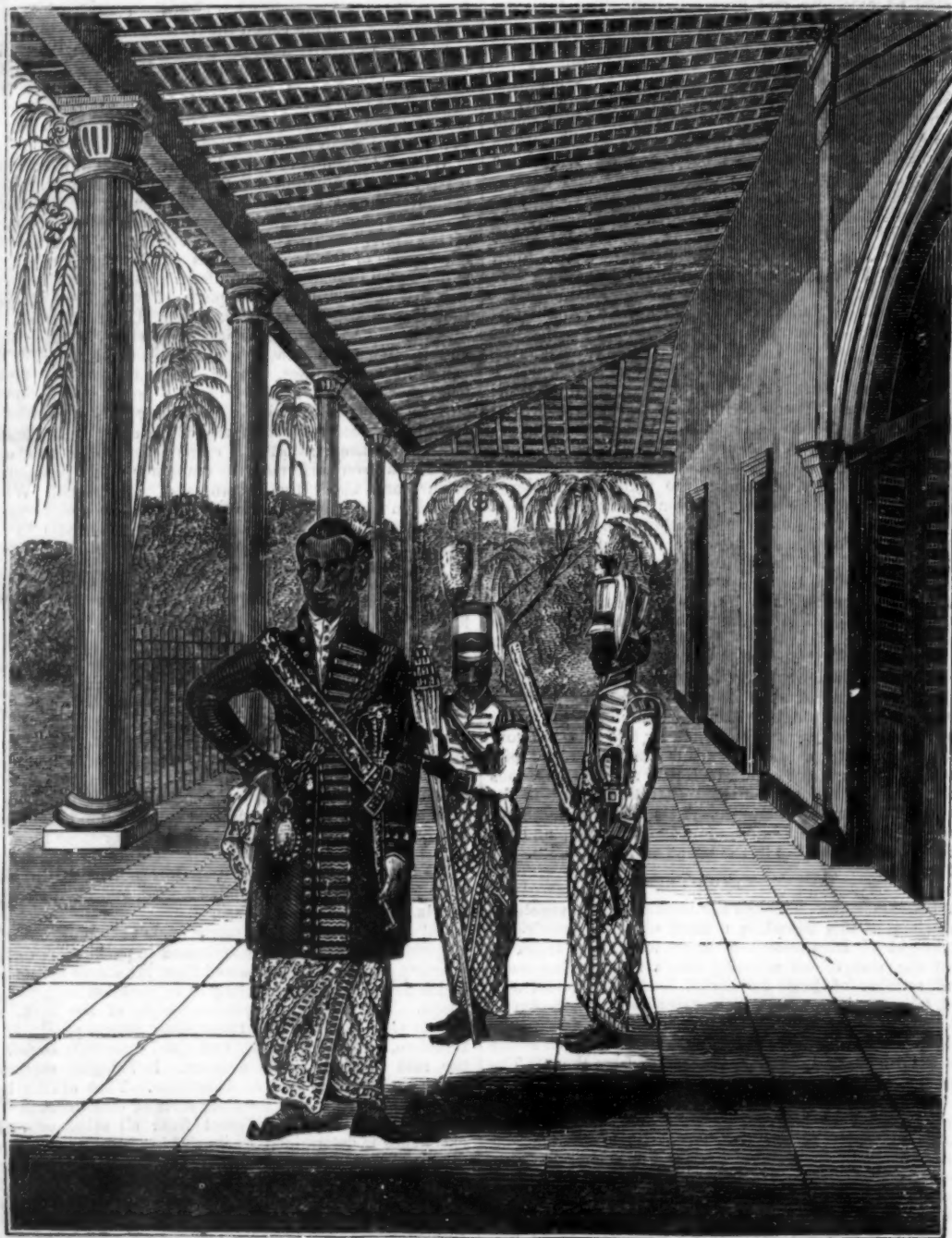
their condition, never repining at its severity. They feel few or no wants, wear no clothing but a coarse bandage round the waist, and live almost in a state of barbarous desuetude. They are governed in the same manner as other casts, by their own officers, over whom is placed an English superintendent, who is looked up to as the chief of the whole tribe. The inhabitants of each district where cinnamon grows, are bound to deliver yearly, a certain quantity ready prepared for the market. Upon which condition they are allowed to have gardens and pieces of land rent free, besides enjoying other privileges. They likewise obtain additional remuneration, sometimes in rice, and sometimes in money, according to the time and labour employed by them in the public service. Every individual is obliged to furnish a stated proportion of cinnamon in the season; and if any one deliver a larger quantity than what is required of him by the stipulation of the British

Government, he draws extra payment for the surplus portion*.

The principal figure represented in our engraving is RAJA PAXA, chief of the east of cinnamon peelers in Ceylon. When the Dutch slave-masters agreed to consider as free, all the children of their slaves, born after the 1th of August, 1816, this amiable person not only followed their example, but was even anxious to bestow immediate liberty upon all slaves, possessed either by himself or by any of his relatives. He is extremely hospitable to Europeans, a man of extensive information, and the best Sanscrit and Pali scholar in the island. The print represents Raja Paxa in the rich costume of his country, attended by two servants, bearing umbrellas. It is copied from a picture by a native artist, kindly lent by Sir Alexander Johnston.

J. H. C.

* See CORDINER.



RAJA PAXA, CHIEF OF THE CINNAMON PEELERS.